



2285 U.S. PTO  
123003

## PATENT APPLICATION

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Docket No: 20067/OPP031475US

### PATENT APPLICATION TRANSMITTAL UNDER 37 C.F.R. 1.53

Mail Stop Patent Application  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

22387 U.S. PTO  
10/748652  
123003



Sir:

Transmitted herewith for filing is the patent application of

Inventor: Geon-Ook PARK

Title: METHOD OF FORMING A TRENCH IN A SEMICONDUCTOR DEVICE

#### 1. Type of Application

- This is a new application for a
- utility patent.

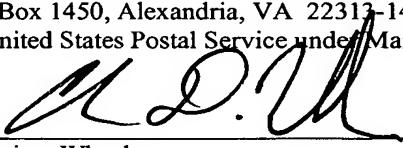
#### 2. Application Papers Enclosed

- 1 Title Page
- 7 Pages of Specification  
(excluding Claims, Abstract, Sequence Listing & Drawings)
- 3 Pages of Claims
- 1 Page of Abstract
- 3 Sheets of Drawings (FIGS. 1A to 2F)
- Formal
- Informal

---

#### CERTIFICATION UNDER 37 CFR 1.10

I hereby certify that this Patent Application Transmittal and the documents referred to as enclosed therewith are being deposited with the United States Postal Service on December 30, 2003 in an envelope addressed to Mail Stop Patent Application, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 utilizing the "Express Mail Post Office to Addressee" service of the United States Postal Service under Mailing Label No. EV 403728099 US.



Charissa Wheeler

**3. Declaration or Oath**

Enclosed

Executed by (check all applicable boxes)

Inventor(s)

Legal representative of inventor(s)  
(37 CFR 1.42 or 1.43)

Joint inventor or person showing a proprietary interest on behalf of inventor who refused to sign or cannot be reached.

The petition required by 37 CFR 1.47 and the statement required by 37 CFR 1.47 are enclosed.  
See Item 5D below for fee.

Not enclosed - the undersigned attorney or agent is authorized to file this application on behalf of the applicant(s). An executed declaration will follow.

**4. Small Entity Status**

Applicant claims small entity status. See 37 CFR 1.27.

A small entity statement is(are) attached.

**5. Additional Papers Enclosed**

Preliminary Amendment

Information Disclosure Statement

Declaration of Biological Deposit

Computer readable copy of sequence listing containing nucleotide and/or amino acid sequence

Microfiche computer program

Associate Power of Attorney

Verified translation of a non-English patent application

An assignment of the invention

Request and Certification Under 35 U.S.C. 122(b)(2)(B)(i)

Return receipt postcard

Other

## 6. Priority Applications Under 35 USC 119

Certified copies of applications from which priority under 35 USC 119 is claimed are listed below and

are attached.  
 will follow.

COUNTRY	APPLICATION NO.	FILED
Korea	10-2003-0001410	January 9, 2003

## 7. Filing Fee Calculation (37 CFR 1.16)

### A. Utility Application

CLAIMS AS FILED - INCLUDING PRELIMINARY AMENDMENT(S) (IF ANY)						
			SMALL ENTITY	OTHER THAN A SMALL ENTITY		
	NO. FILED	NO. EXTRA	RATE	Fee	RATE	Fee
BASIC FEE				\$385.00		\$770.00
TOTAL	8 - 20	= 0	X 9 =		X 18 =	\$0.00
INDEP.	1 - 3	= 0	X 43 =		X 86 =	\$0.00
First Presentation of Multiple Dependent Claim			+ 145 =		+ 290 =	
Filing Fee:					OR	\$770.00

B.  Design Application (\$170.00/\$340.00) Filing Fee: \$0.00

C  Plant Application (\$265.00/\$530.00) Filing Fee: \$0.00

### D. Other Fees

Recording Assignment  
[Fee — \$40.00 per assignment] \$0.00

Petition fee for filing by other than all the inventors  
or person on behalf of the inventor where  
inventor refused to sign  
or cannot be reached [Fee — \$130.00] \$0.00

Other \$0.00

**Total Fees Enclosed \$770.00**

**8. Method of Payment of Fees**

Enclosed check in the amount of: \$770.00

Charge Deposit Account No. 50-2455 in the amount of: \$0.00  
A copy of this Transmittal is enclosed.

Not enclosed

**9. Deposit Account and Refund Authorization**

The Commissioner is hereby authorized to charge any deficiency in the amount enclosed or any additional fees which may be required during the pendency of this application under 37 CFR 1.16 or 37 CFR 1.17 or under other applicable rules (except payment of issue fees), to Deposit Account No. 50-2455. A copy of this Transmittal is enclosed.

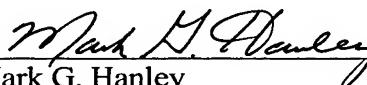
Please refund any overpayment to Grossman & Flight LLC at the address below.

**10. Correspondence Address**

Respectfully submitted,

GROSSMAN & FLIGHT LLC  
20 North Wacker Drive  
Suite 4220  
Chicago, Illinois 60606-6357  
(312) 580-1020  
(312) 580-9696 (Telefacsimile)

By:

  
\_\_\_\_\_  
Mark G. Hanley  
Registration No.: 44,736

**December 30, 2003**